



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2021-0216; Project Identifier 2018-CE-061-AD; Amendment 39-21860; AD 2021-26-02]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Gulfstream Aerospace Corporation Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all Gulfstream Aerospace Corporation (Gulfstream) Model GV and GV-SP airplanes. This AD was prompted by the omission of a life limit in the airworthiness limitations section (ALS) of the maintenance manual for a certain main landing gear (MLG) trunnion pin. This AD requires revising the ALS of your existing instructions for continued airworthiness (ICA) or inspection program for the airplane to establish a life limit of 20,000 flight cycles for the affected MLG trunnion pin. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Gulfstream Aerospace Corporation, Technical Publications Dept., 500 Gulfstream Road, Savannah, GA 31402-2206; phone: (800) 810-4853; fax: (912) 965-3520; email: [pubs@gulfstream.com](mailto:pubs@gulfstream.com); website: <https://www.gulfstream.com/en/customer-support/>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

#### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0216; or in person at Docket Operations between 9

a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Miral Patel, Aviation Safety Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: (404) 474-5590; fax: (404) 474-5606; email: [miral.patel@faa.gov](mailto:miral.patel@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Background**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Gulfstream Aerospace Corporation (Gulfstream) Model GV and GV-SP airplanes. The NPRM published in the *Federal Register* on September 17, 2021 (86 FR 51842). The NPRM was prompted by notification from Gulfstream that a life limit for replacing MLG trunnion pin part number (P/N) 1159SCL566-15 had been omitted from the ALS of the maintenance manual for Model GV and GV-SP airplanes. Gulfstream revised the ALS for the applicable airplanes to establish a life limit of 20,000 flight cycles for the affected MLG trunnion pin. A trunnion pin remaining in service beyond its fatigue life could lead to fracture and failure of the trunnion pin.

In the NPRM, the FAA proposed to require revising the ALS of your ICA or inspection program for the airplane to establish a life limit of 20,000 flight cycles for the affected MLG trunnion pin. The FAA is issuing this AD to prevent MLG failure, which could lead to a runway excursion.

**Discussion of Final Airworthiness Directive**

**Comments**

The FAA received no comments on the NPRM or on the determination of the costs.

## Conclusion

The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

## Related Service Information

The FAA reviewed Gulfstream GV Aircraft Maintenance Manual, Revision 53, dated March 15, 2021; Gulfstream G550 Aircraft Maintenance Manual, Revision 34, dated March 15, 2021; and Gulfstream G500-5000 Aircraft Maintenance Manual, Revision 34, dated March 15, 2021. For the applicable marketing designation specified on each document, the revised service information adds a life limit for MLG trunnion pin P/N 1159SCL566-15.

## Costs of Compliance

The FAA estimates that this AD affects 516 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

### Estimated costs

Action	Labor Cost	Parts Cost	Cost per airplane	Cost on U.S. operators
Revise the ALS	1 work-hour x \$85 per hour = \$85	Not applicable	\$85	\$43,860

## Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2021-26-02 Gulfstream Aerospace Corporation:** Amendment 39-21860; Docket No. FAA-2021-0216; Project Identifier 2018-CE-061-AD.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Gulfstream Aerospace Corporation Model GV and GV-SP airplanes, all serial numbers, certificated in any category.

Note 1 to paragraph (c): Model GV-SP airplanes are also referred to by the marketing designations G500, G550, and G500-5000.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 3200, Landing Gear System.

**(e) Unsafe Condition**

This AD was prompted by the omission of a life limit in the airworthiness limitations section (ALS) for a certain main landing gear (MLG) trunnion pin. The FAA is issuing this AD to prevent a MLG trunnion pin from remaining in service beyond its fatigue life. This unsafe condition, if not addressed, could result in MLG failure and could lead to a runway excursion.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Revise the ALS**

Within 12 months after the effective date of this AD, revise the existing ALS of the instructions for continued airworthiness or aircraft inspection program for your airplane by establishing a life limit of 20,000 flight cycles for each MLG trunnion pin part number 1159SCL566-15.

Note 2 to paragraph (g): Table 5 in Section 05-10-10 of the following aircraft maintenance manuals contains the life limit in paragraph (g) of this AD: Gulfstream GV Aircraft Maintenance Manual, Revision 53, dated March 15, 2021; Gulfstream G550 Aircraft Maintenance Manual, Revision 34, dated March 15, 2021; or Gulfstream G500-5000 Aircraft Maintenance Manual, Revision 34, dated March 15, 2021.

**(h) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Atlanta ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the

manager of the certification office, send it to the attention of the person identified in paragraph (i)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(i) Related Information**

(1) For more information about this AD, contact Miral Patel, Aviation Safety Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: (404) 474-5590; fax: (404) 474-5606; email: [miral.patel@faa.gov](mailto:miral.patel@faa.gov).

(2) For service information identified in this AD, contact Gulfstream Aerospace Corporation, Technical Publications Dept., 500 Gulfstream Road, Savannah, GA 31402-2206; phone: (800) 810-4853; fax: (912) 965-3520; email: [pubs@gulfstream.com](mailto:pubs@gulfstream.com); website: <https://www.gulfstream.com/en/customer-support/>. You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

**(j) Material Incorporated by Reference**

None.

Issued on December 6, 2021.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

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